assembling a device by processing the wafer on which the pattern has been exposed.

REMARKS

Applicants request favorable consideration and allowance of the subject application in view of the preceding amendments and the following remarks.

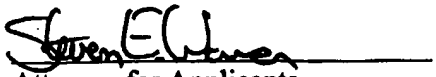
To place the subject application in better form, the specification has been amended to correct minor informalities. No new matter has been added by these changes.

Claims 1-15 are presented for consideration. Claims 1 and 7 are independent. Claims 1 and 7 have been amended to clarify features of the subject invention. Support for these changes may be found in the application as originally filed. Therefore, no new matter has been added.

Claims 1-15 previously allowed in this application. Applicants submit that the amendments to claims 1 and 7 do not affect the allowability of these claims. Therefore, Applicants further submit that the instant application is in condition for allowance. Favorable consideration and an early Notice of Allowance are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our address listed below.

Respectfully submitted,



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APPENDIX A

IN THE SPECIFICATION:

Please substitute the paragraph beginning at page 6, line 9, and ending on page 7, line 11, with the following.

-- In accordance with a second aspect, the present invention provides a method for correcting exposure data for drawing a pattern on an object to be exposed by a plurality of charged particle beams, comprising the step of creating standard dose data for each irradiation position of the charged particle beams in order to expose a standard pattern on the object to be exposed; the step of creating or renewing a plurality of proximity effect correction data for each irradiation position, depending on conditions of the object to be exposed; the step of selecting any one piece of the proximity effect correction data, from plural pieces of the proximity effect correction data for each irradiation position; the step of performing a proximity effect correction with respect to the standard dose data based on the selected data, and exposing a pattern on the object to be exposed; the step of evaluating the exposed pattern, and judging whether the selected one piece of proximity effect correction data is the optimum data for controlling the standard dose data; the step of determining the optimum proximity effect correction data for controlling the standard dose data in accordance with the judgment; the step of measuring, by a sensor, the irradiation dose of the charged particle beams from each element electron optical system, the irradiation dose having been subjected to a correction by the proximity effect correction data; and

the step of determining the calibration data of each of the element electron optical systems, based on the irradiation dose measured by the above-mentioned measuring. --

Please substitute the paragraph beginning at page 7, line 25, and ending on page 8, line 3, with the following.

-- The conditions are preferably determined as at least one parameter among the [foundamental] fundamental conditions of the object to be exposed, the resist material, and a backward-scattering radius. --

Please substitute the paragraph beginning at page 15, line 3, with the following.

-- Fig. 5 shows the first electron optical system array LA1. Each of the first electron optical system [array] arrays LA1 has an upper electrode plate UE, an intermediate electrode plate CE, and a lower electrode plate LE, in each of which a plurality of doughnut-shaped electrodes corresponding to a plurality of apertures is arranged. Each of the first electron optical system arrays LA1 is constructed by laying up these three electrode plates through the intermediary of insulating materials. --

IN THE CLAIMS

1. (Amended) A charged particle beam exposure system which draws a pattern on an object to be exposed by a plurality of charged particle beams emitted from a plurality of element [electron] optical systems, said system comprising:

(a) a storage device for storing:

(i) a standard dose data for controlling the irradiation of charged particle beams to an object to be exposed;

(ii) plural pieces of proximity effect correction data for correcting the irradiation of the charged particle beams for each incidence position with respect to the object to be exposed, in order to reduce the influence of a proximity effect; and

(iii) calibration data for correcting variations in the irradiation dose among the plurality of the charged particle beams emitted from the plurality of element [electron] optical systems; and

(b) a controller for controlling the irradiation of each of the charged particle beams, based on the standard dose data, the proximity effect correction data, and the calibration data.

7. (Amended) A method for correcting exposure data for drawing a pattern on an object to be exposed by a plurality of charged particle beams emitted from a plurality of element [electron] optical systems, said method comprising the steps of:

creating a standard dose data for each irradiation position of the charged particle beams in order to expose a standard pattern on the object to be exposed;

creating or renewing a plurality of the proximity effect correction data for each irradiation position, depending on conditions of the object to be exposed;

selecting any one piece of the proximity effect correction data, from plural pieces of the proximity effect correction data for each irradiation position;

performing a proximity effect correction with respect to the standard dose data based on the selected data, and exposing a pattern on the object to be exposed;

evaluating the exposed pattern, and judging whether the selected one piece of proximity effect correction data is the optimum data for controlling the standard dose data;

determining the optimum proximity effect correction data for controlling the standard dose data in accordance with the judgment;

measuring, by a sensor, the irradiation dose of the charged particle beams from each element [electron] optical system, the irradiation dose having been subjected to a correction by the proximity effect correction data; and

determining the calibration data of each of the element [electron] optical systems, based on the irradiation dose measured in said measuring step.